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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,836	11/13/2003	Mark R. Gordon	CHA920030026US1	9524
23550	7590	01/14/2009		
HOFFMAN WARNICK LLC				
75 STATE STREET				
14TH FLOOR				
ALBANY, NY 12207				
EXAMINER				
ADAMS, CHARLES D				
ART UNIT		PAPER NUMBER		
2164				
NOTIFICATION DATE		DELIVERY MODE		
01/14/2009		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTOCommunications@hoffmanwarnick.com

**Advisory Action
Before the Filing of an Appeal Brief**

Application No.

10/712,836

Applicant(s)

GORDON, MARK R.

Examiner

CHARLES D. ADAMS

Art Unit

2164

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 18 December 2008 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: _____.
Claim(s) objected to: _____.
Claim(s) rejected: 1-4, 7-12, 16-21, and 24-26.
Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____.
13. ☒ Other: See Continuation Sheet.

/Charles Rones/
Supervisory Patent Examiner, Art Unit 2164

Continuation of 11. does NOT place the application in condition for allowance because: Applicant argues that the paragraphs [00015] and [00042] of the instant specification make it clear that the invention is loaded onto a computer system, having some type of storage for a computer program, and thus make the objection to the specification incorrect. In response to this argument, it is noted that the claims are directed towards "a computer readable storage medium", rather than "a computer system." It is also noted that neither the claims nor the specification detail exactly what is meant by "computer readable storage medium", and the specification is silent as to the existence of a computer readable storage medium.

In response to the rejection under 35 USC 101, the rejection is withdrawn for claims 1-4 and 6-9 in light of the amendments to claim 1. It is noted that the rejection is maintained for claims 10-12 and 15-18, as the specification does not provide enough information to adequately inform one of ordinary skill in the art what is meant by "computer readable storage medium." As noted above, the specification does not mention computer readable storage medium.

In regards to the rejection under 35 USC 103(a), Applicant argues that "Brickell merely discloses a Summary to Detail Reduction Factor (SDR), which is a value between 0 and 1 formed by the division of the number of rows in a new summary table by the number of rows in the summary table it replaces. Brickell discloses an example, "a summary table that contains 250 rows of data, which is used in place of using detail tables which have 1000 rows, the reduction factor would be 250/1000 or .25" (Brickell col 8, lines 37-44). Since Brickell's SDR makes no comparison between different factors (i.e. time and space), it fails to normalize the performance measure and allow for comparison between summary tables as recited in the independent claims." In response to this argument, it is noted Brickell et al. normalizes all values so that, no matter the size of the fact table and detail table, the SDR will occur between 0 and 1. There is no discussion in the claims about comparing the different factors during normalization, only about determining a saved time per MB by dividing the performance time for a summary table by the change in size for the summary table. As discussed below, Brickell et al. uses both time and space values to normalize performance measures.

Applicant also argues that "assuming, arguendo, that Brickell teaches a system for normalizing, Brickell still fails to teach normalizing that results in a "saved time per MB that is determined by the change in performance time for a summary table divided by the change in size for a summary table" (claim 1). Brickell's SDR, as disclosed above, is a storage to storage comparison that results in a factor with no units. Such a factor is not equivalent to a saved time per MB normalization, because such a factor is not formed by the division of change in performance time by change in size". As explained above, a normalization occurs with the SDR factor of Brickell et al. The SDR factor determined a change in size because it shows how the query space changed in size by using a summary table in place of a detail table. It is noted that this "change in size" factor is used to calculate a "time saved", in 8:51-54. It is then noted that, in 8:55-56, a "total time" is divided by the "time saved" value. The "total time" represents a change in time, as it is an average time required to execute all queries. Thus, as a normalization was calculated using "total time" divided by a variable that included a "change in size", the calculation done in Brickell et al. 8:35-56 does teach the claimed subject matter.

Applicant then argues, "SDR is a ratio based on the size of the summary table divided by the size of the fact table. A summary table that contains 250 rows of data used in place of a fact table having 1000 rows of data would have an equivalent SDR to a summary table that contains 25,000 rows of data used in place of a fact table having 100,000 rows of data. Yet the summary table containing 25,000 rows of data would require more storage space. Thus, storage space or saved time per MB is never determined in Brickell." In response to this argument, it is noted that, in Figure 3, as described in sections 9:12-25, uses the SDR calculated for a table to determine how quickly the queries are executed. The Y-axis is "performance gain", and the X-axis is "disk space". The example given in Figure 3 shows a performance gain of 20, (or queries executing 20 times faster than previously), for a disk space of 50 MB. This could also be read as a "saved time per MB", or, "20 times as fast for 50 MB of disk space."

Applicant also argues that "as taught in Brickell, Figure 3 applies to the case where there is an absence of workload statistics. Thus, Brickell teaches that Figure 3 is not combinable with a system using query or workload statistics." In response to this argument, it is noted that Brickell et al. also teaches that the output of Figure 3 results in a number that "would indicate that if the same queries within the workload statistics were executed again they would complete 5 times as fast". Thus, Brickell et al. is combinable with a system using query or workload statistics. Also see 9:26-33, wherein Brickell et al. discusses using statistics from previous queries

Applicant continues "Moreover, Brickell in Figure 3 does not teach a normalization element. It is a graph of query performance improvement versus disc space for every possible summary table. Figure 3 of Brickell does not provide normalizing results in a saved time per MB that is determined by the change in performance time for a summary table divided by the change in performance time for a summary table." In response to this argument, it is noted that Brickell states that "the SDR factor is still a good indicator of by how much faster a query will execute with a summary, since it is the row reduction effect of summaries that yield the greatest gain" and "this measure will be calculated for all candidate summaries" (see 9:7-16). As the benefit figure is an indication of "saved time", and as the x axis is a measurement of disk space in MB, Brickell et al. does teach wherein normalizing results in a saved time per MB.

Continuation of 13. Other: In regards to the proposed amendments to the claims, the citations and explanations provide in the Office Action of 30 October 2008 will remain the same for each limitation and claim. The proposed amendments overcome a 101 rejection, and correct an objection to wording found in the independent claims.